# Component Crediting 



South Dakota Department of Education
Child \& Adult Nutrition Services

Welcome to the SD Child and Adult Nutrition Services webinar on Component Crediting.
The following presentation will focus on how to calculate crediting for components in the school lunch and breakfast programs. We will be using recipes, and a component contribution worksheet, which can be found on the CANS-memos webpage, under SNP Memo 235-1 - Recipe Analysis Worksheet.


Before we begin, please go to the CANS-memo page, and save a copy of the Recipe Analysis Worksheet found in SNP Memo 235-1.

Scroll down and find SNP Memo 235-1, and click on the Recipe Analysis Worksheet. This will open a practice worksheet in Word document form. Save the workbook in a location where you will be able to find it.

Please have the practice worksheet and calculator available for this training.
Also, calculating components can be complex and problematic. Please feel free to pause the webinar as you go, or re-watch afterward.

## Starting Out



This practice chili recipe will be used today. Begin by first recording the recipe name and portions per recipe. (click).

We will go through the different components on the coming slides.

## Quantity and Purchase Unit



As you can see, we have added our recipe name and portions per recipe to the component contribution worksheet. We are now going to add the creditable ingredients from the recipe. We have a copy of recipe ingredients in the green box for your convenience.

On the practice worksheet, record the creditable ingredients in column 1, and the quantity of the ingredient in column 2. Record the purchase unit in column 3.

The recipe calls for 7 pounds of ground beef. We have recorded this accordingly on the practice sheet (click). Additionally, the menu planner has decided to also count pinto beans as a meat/meat alternate in the recipe, which is acceptable. We have recorded the half \#10 can of pinto beans in the M/MA section of the worksheet.

NOTE - legumes can be counted as a Meat/Meat Alternate OR a vegetable in a recipe, but cannot be counted as both.

## (click)

Moving down to the Vegetable section, we have recorded diced tomatoes, tomato paste, and fresh onion on the practice worksheet, along with their corresponding quantities, and purchase unit.

We will continue on the following slide.

## Arithmetic - Ground Beef



The next column to fill in is column 4 - servings per purchase unit. We will first do the ground beef. As we can see in the food buying guide, 1 pound provides 11.80 1oz servings of cooked lean meat. (click)

We are going to take the servings per purchase unit from the food buying guide and record it on the practice worksheet. (click)

Please note, we are using the 1 oz line in the food buying guide since it is easier to work with 1 than 1.5. A conversion would be needed later on if we didn't use the 1 oz line.

To fill in column 5, we need to take column $2 \times$ column 4. (click). This means we must take $7 \times 11.8$. When we enter this into our calculator, we get 82.6 . (click). This means that 7 pounds of ground beef provide 82.6 creditable ounces of meat.

We will work on the pinto beans on the following slide.

## Arithmetic - Pinto Beans



6

Since we have completed the ground beef, we will now work on the Pinto Beans. The next column to fill in is column 4 "servings per purchase unit". As we can see in the food buying guide, one \#10 can of pinto beans provide 37.2 servings of $1 / 4$ cup heated, drained beans. (click)

We are going to take the servings per purchase unit from the food buying guide and record it on the practice worksheet. (click)

To fill in column 5, we need to take column 2 x column 4. (click). This means we must take $0.5 \times 37.2$. When we enter this into our calculator, we get 18.6 . (click). This means that half of a \#10 can of pinto beans provides $18.6 \frac{1}{4}$ cups.

Please note - in this example, we are crediting the pinto beans as a meat/meat alternate. This is somewhat uncommon, but it is allowable. For crediting purposes, $1 / 4$ c of legumes credits as 1 oz of meat/meat alternate. Since the legumes are already in this $1 / 4 \mathrm{c}$ format from the food buying guide, no conversion will be needed later on. We will discuss this more later in the presentation.

Next, we will work on the vegetables.


The next column to fill in for the vegetables is column 4 "servings per purchase unit".
For purposes of this exercise, we have provided a snippet of each vegetable on this page. The canned tomatoes have the green border, the tomato paste has the blue border, and the onions have the red border.

As we can see in the food buying guide, one \#10 can of canned, diced tomatoes provides 49.2 servings of $1 / 4$ cup heated, vegetable and juice. (click)
We can also see that one number 10 can of tomato paste provides 192 servings of $1 / 4$ cup vegetable. (click)
And also, we can see that 1 pound of onions provide 7.9 servings of $1 / 4$ cup vegetable. (click)

We are going to take the servings per purchase unit from the food buying guide and record it on the practice worksheet. (click)

We will fill out column six on the next slide.

## Arithmetic - Vegetables, continued

| Ingredients <br> (1) | Quantity of Ingredient As Purchased (number of purchase units) <br> (2) | Purchase Unit | Servings Per Purchase Unit Food Buying Guide <br> (4) | Mest/Meat Altemste (ounces) (2) $\times(4)=$ (5) | Fruit' Vegetable (1/4 cup) <br> (2) $\times(4)=$ <br> (6) | Grains/Bread (Servings) <br> (2) $\times(4)=$ <br> (7) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F/V |  |  |  |  |  |  |
| Diced <br> Tomatoes | 1/2 | \#10 can | 49.2 |  | 24.6 |  |
| Tomato Paste | 1/4 | \#10 can | 192 |  | 48 |  |
| Fresh Onions | 1/2 | Lb | 7.9 |  | 3.95 |  |

As we can see column $2 \times$ column 4 will give us column 6 .
For diced tomatoes, we are going to take our 49.2 from the food buying guide (click) , and multiply by 0.5 (click). This gives us 24.6 (click).
For tomato paste, we are going to take 192 from the food buying guide (click), and multiply by 0.25 (click). This gives us 48 . (click)
For the onions, we are going to take 7.9 from the food buying guide (click), and multiply by 0.5 (click). This gives us 3.95 . (click)

We will complete the totals on the following slide.

## Totals - Top



By now, your practice worksheet should be filled out and look like this, except for the totals.

Add column 5, and total at the bottom. Likewise, add column 6 and total at the bottom. Fill in the portions per recipe of 50, as previously addressed. Remember, column 6 is all in $1 / 4$ cup format, as this is how vegetables are listed in the food buying guide.

We will complete the bottom of the totals on the following slide.

## Totals - Bottom

| (page numbers refer to 2001 Food Buying Guide) <br> NOTES: <br> - Oz to lb conversion chart is on page I-36 FBG. <br> - Remember to convert ready-to-use products to their "as purchased" amount. <br> - The values for Col. 5, $\underline{6,8} 7$ are found by multiplying the value of Col. 2 by the value in Col. 4 . <br> - Remember to divide the total $1 / 4$ servings of $F / V$ by 4 to get the cups of that component. <br> - Grains/bread in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data or that same size. <br> - Grains/bread in numbers of servings: use the yield data provided for 1 grains/breads serving. | Totals | 101.2 | 76.55 (1/4 c) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Portions per recipe | 50 | 50 |  |
|  |  | total divided by number of portions | total divided by 4 (to get units in cups), then divided by number of portions | total divided by number of portions |
|  | Calculations <br> $1 / 4$ cup $=1$ oz mma | $\begin{aligned} & 101 \div 50= \\ & 2.02 \end{aligned}$ | $\begin{aligned} & 76.55 \div 4= \\ & 19.13 \div 50= \\ & 0.38 \end{aligned}$ |  |
| This recipe provides __ portions. | Each Portion Contributes | 2 oz | $3 / 8$ cups(s) | servings |
|  |  | meat/meat alternate | fruit/ vegetables | grains/ breads |

After we have totaled column 5 and column 6, we now have to divide by portion.
(click) For column 5, we are adding the amounts from the ground beef and the pinto beans. 101.2 ounces $/ 50$ servings $=2.02$ ounces per serving. We will round down to 2 ounce equivalents per serving.

Please note - As a reminder for this example, we are crediting the pinto beans as a meat/meat alternate. This is somewhat uncommon, but is allowable. For crediting purposes, $1 / 4 \mathrm{c}$ of legumes credit as 1 oz of meat/meat alternate. Since the legumes are already in this $1 / 4 \mathrm{c}$ format from the food buying guide, no conversion will be needed.
(click) For column 6, we are adding the tomatoes, tomato paste, and onions. We have $76.551 / 4$ cups after totaling the vegetables. Before dividing by the number of servings, lets first convert from quarter-cups to cups.

We will take 76.55 quarter-cups divided by 4 , giving us 19.13 cups. Now, we will take our 19.13 cups and divide by the 50 servings, giving us 0.38 cups per serving. 0.38 cups $=3 / 8$ cup of vegetable per serving.
Each 1 cup serving of the chili provides 2 oz eq meat/meat alternate, and $3 / 8$ cup vegetable. As a reminder, the recipe we used for this example is not standardized, and may need adjustments before being cooked.

## Let's try it again!



Here we have another recipe displayed. This recipe is for a Tuna Noodle Casserole, serving 100 portions at 1 cup a piece.

The ingredients associated with crediting include as follows:

- Whole Wheat enriched noodles at 5 lbs . (click)
- Tuna, water-packed, chunk light, drained \& flaked at 4-66 1/2 oz cans (click)
- Peas, frozen at 10 1/2 lbs (click)

On the following slide, we are going to look at the component contribution worksheet.

## Component Contribution



Here, we have listed the creditable items from the previous recipe. (click)

Additionally, we have listed the quantities needed, as listed in the recipe. (click)

Also, we have listed the purchase unit. This is the unit which the corresponding product is to be purchased in. (click)
This is important, as this is how you will locate the product in the food buying guide.

On the coming slides, we will complete the rest of the worksheet. In order to complete the rest of the worksheet, we will need to look up the items in the food buying guide, and do a little math.

## Food Buying Guide Info



Here we have the food buying guide information for the creditable food items.

For the Tuna, we can see that one 66 1/2oz can provides 50.5 servings at one ounce. (click).

For the Peas, we can see that 1 pound of frozen peas provides 9.59 servings of a 1/4 cup cooked, drained vegetable (click).

For the Egg Noodles, we can see that 1 pound of egg noodles provides 20.1 servings of $1 / 2$ cup cooked pasta. (click)

The numbers we will be adding to our worksheet are the number of servings per purchase unit. (click).

On the next slide, we are going to put these numbers to work.

## Doing a little math



The red border identifies the servings per purchase unit, which we found in the food buying guide, and had listed on the previous slide.

Read the instructions on column 5, 6, and 7. (click).
In all columns, we are taking the figure from column 2 multiplied by the figure from column 4.

We will look more closely at these figures on the following slide.

## A little more math


(click) In the red, when we take the number of cans, 4, multiplied by the servings per can according to the food buying guide, 50.5, we get 202 ounces. Report this in column 5, the Meat column.
(click) in the blue, when we take the number of pounds, 10.5 , multiplied by the servings per pound according to the food buying guide, 9.59 , we get 101 servings. Report this in column 6, the vegetable column. Remember, vegetables are listed in $1 / 4$ cup servings in the food buying guide.
(click) in the green, when we take the number of pounds, 5 , multiplied by the number of servings per pound according to the food buying guide, 20.1, we get 101 servings. Report this in column 7, the grain column.

One note about grain. In most cases, recipes involving pasta will require the pasta to be boiled first, before adding to the pan. Use the Food Buying Guide for component crediting in this case. In the event of adding dry pasta to a recipe, such as lasagna, consult the additional notes in the food buying guide, or use the total ounces of dry pasta added to the recipe, and credit ounce-for-ounce, as described in Group H of the Grain/Bread chart.

We will look at the bottom calculations of this worksheet on the coming slide.

| (page numbers refer to 2001 Food <br> Buying Guide) <br> NOTES: <br> - Oz to lb conversion chart is on page I-36 FBG. <br> - Remember to convert ready-to-use products to their "as purchased" amount. <br> - The values for Col. 5, 6,\&7 are found by multiplying the value of Col. 2 by the value in Col. 4 . <br> - Remember to divide the total $1 / 4$ servings of F/V by 4 to get the cups of that component. <br> - Grains/bread in portions of a cup: convert all needed servings into the same portion of a cup and use the corresponding yield data or that same size. <br> - Grains/bread in numbers of servings: use the yield data provided for 1 grains/breads serving. | Totals | 205 (oz) | 101 (1/4 c) | 101 servings |
| :---: | :---: | :---: | :---: | :---: |
|  | Portions per recipe | 100 | 100 | 100 |
|  |  | total divided by number of portions | total divided by 4 (to get units in cups), then divided by number of portions | total divided by number of portions |
|  | Calculation | $\begin{aligned} & 205 \div 100= \\ & 2.05 \mathrm{oz} \end{aligned}$ | $101 \div 4=$ <br> 25.25 cups $\div$ $100=0.25$ <br> cups | $\begin{aligned} & 101 \div 100=1 \\ & \text { serving }(1 / 2 \\ & \text { cup) } \end{aligned}$ |
| This recipe provides __ portions. | Each Portion Contributes | 2 oz | 1/4 cups(s) | 1 servings |
|  |  | meat/meat alternate | fruit/ vegetables | grains/ breads |

After calculating our column 2 multiplied by column 4, we brought our totals down to the total line.

As we can see, we have the total of the meat column - column 5 - in the red box. (click)
We have the vegetable total - column 6 - in the blue box. (click) And we have the grain total - column 7 - in the green box. (click)

We now have to divide by the portions per recipe. In this case, 100.

For the meat, we take our 205 ounces and divide by 100, giving us 2 ounces per portion.

Remember, for vegetables, we first have to convert into cup form, which means we have to take our quarter-cup total and divide by 4.
We will take our $1011 / 4$ cups and divide by 4 , giving us 25.25 cups. Then, we divide by our 100 servings, giving us 0.25 cups, or $1 / 4$ cup vegetable per serving.

For grain, we take our 101 servings divided by 100, giving us 1-1/2 cup serving, or 1 ounce equivalent.

## Tuna \& Noodles Recipe



We can then take the serving sizes and transfer them to our Standardized Recipe form so we know how this recipe will credit.

## Thank You!

Please feel free to contact the CANS office with any questions!

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